

ATTACHMENT A Remarks

The claim for priority has been changed to make it clear that Applicant is no longer claiming priority based on U.S. Application Serial No. 09/435,854, filed on November 8, 1999.

Turning to the matters raised in the Office Action mailed on July 19, 2007, and considering the matters raised in the Office Action in the same order as raised, Claim 22 has been corrected proposed by the Examiner. The assistance of the Examiner in this regard is appreciated.

Claims 1, 3, 4, 6-10, 12, 20, 23, 24, 28, 30, 33, 40, 41, 46, 54, 58-65, 67-72, 79, 82, 83, 85, 86, 89, 91, 92, and 94-100 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Rekimoto et al. (Rekimoto) in view of Jaeger et al (Jaeger). The remaining claims are rejected over these same two references in view of one or more additional references. These rejections are all respectfully traversed, although independent Claims 1 and 54 have been amended to evenly more clearly distinguish over the cited references.

The Examiner relies on the teachings of the Rekimoto patent with respect to Figure 18. The patent states the following at column 19, line 57 to column 20, line 27:

Where the semi-transparent screen 2B is a table surface as in the case of this embodiment, the following operation is possible.

For example, where some object such as a piece of tableware is placed on the semi-transparent screen 2B as the table surface, an image reflecting the shape of the object is obtained as detection image information through infrared light that is reflected from the object. In the previous embodiments, this type of variation in image is used as manipulation information. In contrast, in this embodiment, image data of the detection image information can be used as an image to be projected by the projector 5. That is, for example, a configuration is possible in which an image of an object placed on the semi-transparent screen 2B is used like its shadow (see shadow displays SHD shown in FIG. 18). In this case, the position of a shadow display SHD on the semi-transparent screen 2B varies so as to follow the position of the object. And the shape of the shadow display SHD varies in accordance with the distance of the object from the surface of the semi-transparent screen 2B. Therefore, there can be obtained a visual effect that would be interesting to a user.

To realize the above type of shadow display SHD, detection image information that is obtained in the input image processing section 12 of the

- 1 -

control device 6 may be supplied to the image combining section 17 as image data. The image combining section 17 combines image data. The image combining section 17 combines image data (detection image information; image data for a shadow display SHD) and a remote controller display RMD that has been generated by the image generation section 17 under the control of the database driving section 14, whereby a resulting image is finally projected onto the semi-transparent screen 2B as shown in FIG. 18.

Although a detailed description is not made here, an enhanced visual effect can be obtained by applying a special effect to image data of detection image information through proper signal processing, such as multi-colorizing it or changing its shape.

It is respectfully submitted that the claims now presented clearly distinguish over Rekimoto however combined with Jaeger. First, Rekimoto does not disclose a plurality of physical control details mounted to a screen. In fact, the tableware to which Rekimoto makes reference is clearly movable around on the table surface formed by the screen and is also capable of being lifted from that surface. Further, the Rekimoto reference only discloses sensing the location of an object, i.e., in an xy plane or along the z axis if the object is lifted off the table. Moreover, Rekimoto does not disclose how this is done. In any event, the Rekimoto apparatus, as disclosed, would have no way of sensing, for example, the position of a rotatable control knob as is now claimed in the claims presented. Further, as is clear from the passages cited above, this embodiment of Rekimoto is concerned with projecting images and not with controlling a function of anything other than the projector. Moreover, the teachings of Rekimoto have nothing whatsoever to do with those of Jaeger and the very general indication of possible applications at lines 46-50 of column 19 does not change this.

Turning to Jaeger, it is also noted that the teachings of Jaeger are inconsistent with those of Rekimoto. As is evident from the figures to which the Examiner refers, the optical sensing mechanism in Jaeger is located behind the LCD screen and would block that screen if the teachings of Jaeger and Rekimoto were somehow combined. This is evident from, for example, Figure 21 of Jaeger.

Further, claim 1 includes the subject matter of claims 62 and 63, and in this regard, recites that the display screen comprises part of a display system capable providing, on the screen, different images associated with the plurality of physical

control details and that the images include at least two of an audio image, a climate control image, and a navigational guidance image. Further, as indicated above, claim 1, as amended, recites that at least one of the physical control details comprises a rotatable control knob.

In the rejection of claims 62 and 63, it is contended that Rekimoto discloses a display screen comprising part of a display system capable of providing, on said display screen, different configurable images (SHD in Fig. 18) associated with the plurality of physical control details (col. 20, lines 4-27). To the extent that this language is somehow readable on the different images produced when the cups and saucers of Rekimoto are moved around on the table surface or moved off that surface, this is all the Rekimoto reference teaches, i.e., the Rekimoto patent only teaches modifying the image on the screen and does not teach control of any other function. Further, it is respectfully submitted that the teachings of Jaeger relied on do not disclose what the Examiner contends they disclose. Specifically, lines 5-10 of column 12 do not disclose an audio image but rather simply a display of "changeable graphics such as scales 76." Similarly, lines 48-52 of column 16, cited by the Examiner, relate to providing the radio 128 with a connector for plugging in an entirely separate computer of the lab or notebook type. Any display provided is provided on the separate computer and not on the screen of the basic Jaeger system.

None of the other references relied on in rejecting various of the dependent claims make up the deficiencies of the Rekimoto and Jaeger patents as references against claim 1.

For the reasons set forth above, it is respectfully submitted that given the actual teachings of Rekimoto and Jaeger, any combination of the two references would necessarily be based on the improper use of highsight, and, moreover, even if the references were to be somehow combined, the resultant hybrid device would not meet the terms of amended claim 1.

Turning to claim 54, this claim has been amended in a manner similar to claim 1 and distinguishes over Rekimoto and Jaeger for substantially the same reasons as those set forth above in support of patentability of claim 1.

- 3 -

Turning to claim 101, this claim is modeled after original claim 1 and additionally recites, inter alia, that at least one of the physical control details comprises a rotatable control knob, and that the computer reconfigures the instrument panel from a display on the screen of one vehicle function to a different display on the screen of at least one other vehicle function, with the vehicle functions and associated displays on the screen being selected from the group consisting functions and displays of an audio system, climate control system and navigation system. This is in addition to the computer determining, from a current position of a physical control detail sensed by the electrooptical sensing means, at least one input to control a currently configured function of the vehicle. As indicated above, Rekimoto is solely concerned with controlling the image produced on the projector screen. Further, there is nothing whatsoever disclosed in this reference that would lead to sensing the current position of a rotatable control knob. Moreover, for the reasons set forth above in support of the patentability of claim 1, the computer of Rekimoto clearly would not perform the functions set forth in the last paragraph of claim 101, and no combination of Rekimoto with Jaeger would result in a computer for performing these functions.

The dependent claims are patentable for at least the reasons set forth above in support of the claims parent thereto.

END OF REMARKS